

City of Seattle Outfalls

City of Seattle Response to Request for Information Regarding the Harbor Island Superfund Site, East Waterway Operating Unit

D. QUESTIONS

1. Identification and Association with Subject Property

- a. Provide the full legal name and mailing address of Respondent.

City of Seattle
c/o William Devereaux
Director, Environmental Management and Real Estate Division
Seattle City Light
700 5th Avenue, Suite 3316
P.O. Box 34023
Seattle, Washington 98124-4023

- b. For each person answering these questions on behalf of Respondent, provide that person's:
- i. full name;
 - ii. title;
 - iii. business address and electronic mail address; and
 - iv. business telephone number.

Anne Gettel
Senior Paralegal, Environmental Protection Section
Seattle City Attorney's Office
701 Fifth Avenue, Suite 2050
Seattle, WA 98104-7095
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206-615-1317

- c. If Respondent wishes to designate an individual for receiving future correspondence from the EPA concerning the EWOU, please indicate so here by providing that individual's name, mailing address, electronic mail address, telephone number, and fax number.

Pete Rude
Senior Sediment Scientist
Seattle Public Utilities
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Seattle, WA 98104-4018
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- d. Provide the address of each Subject Property, the time period when Respondent held any ownership or other interest in the Subject Property, and the type of interest held.

This response addresses outfalls owned and operated by the City of Seattle in the East Waterway Operating Unit (EWOU) geographic area of interest outlined by EPA. Based on available documentation, the City has owned and operated 17 outfalls and 11 overflow points in the EWOU area of interest. Outfall locations and activities are described in the response to 1.h.

- e. Identify all materials used or created by Respondent's activities or operations at each Subject Property.

No materials are created or used in connection with the City's outfalls. In general, historic box sewers were constructed of materials including timber, concrete, steel, and brick.¹ Creosote-treated wood was used with some early outfalls.² Later outfalls were built of reinforced concrete (with steel reinforcement).³

- f. Provide copies of all documents regarding the ownership or environmental conditions of the Subject Property, including, but not limited to, deeds, sales contracts, leases, surveys, investigations, sampling, reports, blueprints, "as-builts," and photographs.

Responsive documents have been produced and indexed.

- g. Provide information on the condition of the Subject Property when purchased or at the beginning of the relevant time period; describe the source, volume, and content of any fill used during the construction of the buildings, including waterside structures such as seawalls, wharves, docks, or marine ways.

Outfalls are constructed in water. The properties on which they are constructed are generally vacant with no improvements. See the response to 1.h and outfall plans listed in the response to 1.n for more information.

¹ SEA EWW_00045288-all, 36-7, Lander St Trunk Sewer engineering plan, 1909; SEA EWW_00045105-all, 36-41, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910; SEA EWW_00054984, at SEA EWW_00055000 (17), CF 49487, 2012; SEA EWW_00045197-all, 36-42-1, Connecticut Trunk Sewer Outfall engineering plan, 1912.

² SEA EWW_00045105-all, 36-41, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910; SEA EWW_00054719-all, 39-9, Hinds Street et al, engineering plan, 1918; SEA EWW_00045921-all, 777-8, W Hanford St et al engineering plan, 1928; SEA EWW_00045197-all, 36-42, Connecticut Trunk Sewer Outfall engineering plan, 1912; SEA EWW_00045921-all, 777-8, W Hanford St et al Trunk Sewer engineering plan, 1928; SEA EWW_00056622, at SEA EWW_0005636 (15), W Lander outfall extension, 1953.

³ City's GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022.

Construction plans indicate that riprap (loose stone), broken concrete, and crushed rock were used around outfall structures in the waterway.⁴ Approximately 70 linear feet of “soft mud” in the East Waterway was filled with stabilizing material when the West Lander Street outfall was extended in 1953.⁵

- h. Describe the activities or operations at each Subject Property including:
 - i. the date such activities or operations commenced and concluded; and

See response to h.ii. below.

- ii. the types of activities or operations performed at each Subject Property, including but not limited to the use, storage, or disposal of any materials in an outdoor location.

Three types of drainage systems have discharged historically or currently discharge to outfalls in the EWOU area of interest: the separated stormwater and sanitary system, the combined sewer system, and the partially separated system.

The separated stormwater system collects stormwater in separated drains that discharge directly to surface water outfalls, while wastewater is collected in separate sanitary sewers that flow to the King County conveyance system and then to treatment plants at West Point or Renton.

The combined sewer system collects stormwater and wastewater in a single pipe, and flow is routed to the treatment plants via the King County system. During large storm events, combined flows can exceed the capacity of the conveyance system. When this occurs, excess flows are discharged to surface waters via CSOs.

Historically, some combined systems discharged to treatment plants, and some discharged directly to surface waters. In 1961, the City and Metro (now merged into King County)⁶ entered into an agreement for sewage disposal, and King County accepted responsibility for treating all the City’s sewage.⁷ Beginning in the 1960s, sewer separation projects undertaken by the City and Metro/King County reshaped discharges to the EWOU area of interest. Most notably, the Elliott Bay Interceptor, which directed wastewater to the West Point treatment plant, was completed in 1970,⁸ and the Kingdome/Industrial Area and Hanford/Lander separations, which were

⁴ SEA EWW_00047717, 51-37, W Lander St Outfall Extension engineering plan, 1953; SEA EWW_00045921-all, 777-8, W Hanford St et al engineering plan, 1928; SEA EWW_00047925, 858-80, Port T-18_SW Florida St Outfall Extension engineering plan, 1967.

⁵ SEA EWW_00056622, at SEA EWW_00056628 (7), W Lander outfall extension, 1953.

⁶ SEA EWW_00056274-all, Metro Merger History, n.d.

⁷ SEA427396, at SEA427398, Agreement between the City and Metro, 1961; King County, at [Controlling combined sewer overflows - King County](#), accessed: 5/19/2022.

⁸ History Link, at [Wastewater Treatment and the Duwamish River - HistoryLink.org](#), accessed: 5/19/2022.

initiated in the 1980s,⁹ changed a number of outfall discharges to the EWW from combined to separated.

The partially separated system collects runoff from streets in a separate storm drain system but runoff from private properties is discharged to the combined sewer.

The City of Seattle has constructed, owned, and operated the following outfalls located within the EWOU geographic area of interest:

East side of East Waterway Outfalls

Connecticut St Outfall – Elliott Bay

In 1905, the City authorized the construction of a box sewer discharging at the foot of Connecticut Street.¹⁰ The Connecticut St outfall was constructed by the City in 1910.¹¹ In 1912, the outfall was altered and extended out farther into the waterway.¹² When constructed, it discharged both sanitary waste and stormwater to Elliott Bay, but¹³ currently, the City's Connecticut St Outfall is a storm drain (SD) connecting to the Port's outfall at the foot of Royal Brougham (formerly Connecticut Street).¹⁴ King County operates a separate CSO discharging at the same location.¹⁵

W Hanford St Outfall

The W Hanford St outfall was constructed by the City in 1928.¹⁶ When constructed, it discharged both sanitary waste and stormwater to the EWW.¹⁷ As noted above, King County took over the City's combined system in the late 1960s. At that time, King County began operating the outfall and operates it as the Hanford #2 CSO.¹⁸

Lander St Outfall/W Lander St Outfall

The W Lander St outfall was constructed by the City in 1909.¹⁹ In 1953, the outfall was extended farther out into the waterway.²⁰ In 1997, the City extended the storm

⁹ SEA419511, at SEA419533, 535 (23, 25) Draft CSO Control Plan, 1987; SEA428905, at SEA428907 (3), Metro Annual CSO Report, 1987/1988.

¹⁰ SEA EWW_00056308-all, Ordinance 12851, 1905; SEA EWW_00056305-all, Ordinance 11328, 1904.

¹¹ SEA EWW_00045105-all, 36-41, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910.

¹² SEA EWW_00054984-all, CF 49487, Contract for outfall extension of the Connecticut St Outfall, 1912.

¹³ SEA EWW_00045105-all, 36-41, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910.

¹⁴ City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022.

¹⁵ City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022.

¹⁶ SEA EWW_00045921-all, 777-8, W Hanford St et al Trunk Sewer engineering plan, 1928.

¹⁷ SEA EWW_00045921-all, 777-8, W Hanford St et al Trunk Sewer engineering plan, 1928.

¹⁸ City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022; SEA EWW_00056898, at SEA EWW_00056903 (6), KC EWW Source Control Status Update, 2022.

¹⁹ SEA EWW_00045288-all, 36-7, Lander St Trunk Sewer engineering plan, 1909.

²⁰ SEA EWW_00047717, 851-37, W Lander St Outfall Extension engineering plan, 1953; SEA EWW_00056348-all, Ordinance 82080, 1953.

drain again out into the waterway.²¹ When constructed, it discharged both sanitary waste and stormwater to the EWW.²² Currently, the City's Lander St Outfall is a storm drain, with King County's Lander CSO discharging to the EWW via the City's SD.²³

S Stacy St Outfall

The construction date and original owner of the S Stacy St Outfall are unknown, but it is believed to have been constructed prior to 1961.²⁴ The 1961 Sewage Disposal Agreement between the City and Metro gave Metro/King County responsibility "for the interception of sanitary sewage at the South Stacy Street . . . outfall."²⁵ 1975 plans and a 1977 contract for a separate sanitary system show that the City converted the outfall to a storm drain in the mid to late 1970s.²⁶

SW Hinds St Outfall/S Hinds St CSO

The S Hinds St outfall was constructed by the City in 1918.²⁷ When constructed, it discharged both sanitary waste and stormwater to the EWW.²⁸ In 1970, the outfall was extended out farther into the waterway.²⁹ Currently, the City operates the SW Hinds St Outfall as a storm drain.³⁰ The City's Hinds St CSO also discharges through the City's SD.³¹

S Spokane St Outfall

The S Spokane St outfall was constructed by the City in 1952.³² In 1971, the City entered into an agreement with Metro for a sewer separation project diverting sewage from the outfall.³³

²¹ SEA EWW_00048186, 890-65, 3rd Ave S Storm Drain Extension engineering plan, 1997.

²² SEA EWW_00045288-all, 36-7, Lander St Trunk Sewer engineering plan, 1909.

²³ City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022; SEA EWW_00056898, at SEA EWW_00056903 (6), KC EWW Source Control Status Update, 2022.

²⁴ SEA EWW_00054737-all, 865-58, S Stacy St sanitary sewers engineering plan, 1975; SEA EWW_00054976, at SEA EWW_00054980 (5), CF 290796, 5th Supplemental Agreement, 1971.

²⁵ SEA EWW_00054976, at SEA EWW_00054980 (5), CF 290796, 5th Supplemental Agreement, 1971.

²⁶ SEA EWW_00054737-all, 865-58, S Stacy St sanitary sewers engineering plan, 1975; SEA EWW_00056384-all, S Stacy sanitary construction, 1977.

²⁷ SEA EWW_00054719-all, 39-9 Improvement of Hinds St Outfall, 1918.

²⁸ SEA EWW_00054719-all, 39-9 Improvement of Hinds St Outfall, 1918; SEA EWW_00054719-all, 39-9, Hinds Street et al engineering plan, 1918.

²⁹ SEA EWW_00054731-all, 861-26, Port T-25 S Hinds St Outfall Extension, 1970.

³⁰ City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022.

³¹ Pers. Comm. w/N. Hart, 5/24/2022; Department of Ecology, at [NPDES Waste Discharge Permit No. WA0031682 \(seattle.gov\)](https://www.npdes.wa.gov/Permits/PermitNo/WA0031682), accessed: 5/19/2022.

³² SEA EWW_00046119, 809-67, Spokane St Sewers et al engineering plan, 1952.

³³ SEA EWW_00056293-all, Ordinance 100228, 1971; SEA EWW_00042906, at SEA EWW_00042924-927 (19-22), Metro correspondence and other records, 1968-1969.

Harbor Island Outfalls

Engineering plans from 1960 and 1963 legislation show that a separated storm drainage system was constructed on Harbor Island in the early 1960s.³⁴ By 1975, eleven outfalls were present and discharged to the surrounding surface waters.³⁵ These stormwater outfalls are summarized below.

SW Massachusetts St Outfall

1960 plans show that the SW Massachusetts SD was constructed at the north end of Harbor Island.³⁶ Since construction, the outfall has discharged solely stormwater into Elliott Bay.³⁷

SW Florida St Outfall

Per 1960 plans, the SW Florida St SD was constructed on the east side of Harbor Island.³⁸ Since construction, the outfall has discharged solely stormwater into the EWW.³⁹ In 1967, the City extended the outfall farther into the EWW.⁴⁰

Outfall Just north of SW Hanford St

A 1975 “existing storm drainage” map shows an outfall located between the SW Hanford St SD and the SW Florida St SD on the east side of Harbor Island that discharges into the EWW.⁴¹ A 1990, storm sewer map does not show the outfall.⁴² It is unknown when this outfall was constructed.

SW Hanford St Outfall

In the early 1960s, the SW Hanford St Outfall was constructed on the east side of Harbor Island.⁴³ Since construction, the outfall has discharged solely stormwater into the EWW.⁴⁴

³⁴ SEA EWW_00056366-all, Ordinance 92235, 1963; SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00051397, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

³⁵ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

³⁶ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

³⁷ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

³⁸ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

³⁹ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

⁴⁰ SEA EWW_00047925, 858-80, Port T-18 SW Florida St Outfall Extension engineering plan, 1967.

⁴¹ SEA EWW_00056491, at SEA EWW_00056518 (28), Harbor Island Sewer and Drain Plan, 1973.

⁴² SEA EWW_00056244, at SEA EWW_00056252 (9), Metro letter to City re PCB results from storm drains on HI, 1990.

⁴³ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁴⁴ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

SW Spokane St Outfall

Engineering plans from 1960 show two separate SD outfalls located in the southeast corner of Harbor Island along SW Spokane St.⁴⁵ Since construction, these outfalls have discharged solely stormwater to the EWW.⁴⁶

Klickitat Ave SW Outfall

1960 engineering plans show that the Klickitat Ave SW SD was constructed on the southwest side of Harbor Island.⁴⁷ Since construction, the outfall has discharged solely stormwater into the WWW.⁴⁸

Chelan Ave SW Outfall

In the early 1960s the Chelan Ave SW SD was constructed on the southwest side of Harbor Island.⁴⁹ Since construction, the outfall has discharged solely stormwater into the WWW.⁵⁰

SW Florida St Outfall

Per the 1960 plans, the SW Florida St SD was constructed on the west side of Harbor Island.⁵¹ Since construction, the outfall has discharged solely stormwater into the WWW.⁵²

SW Lander St Outfall

In the early 1960s, the SW Lander St SD was constructed on the west side of Harbor Island.⁵³ Since construction, the outfall has discharged solely stormwater into the WWW.⁵⁴

⁴⁵ SEA EWW_00051397, 851-51, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960

⁴⁶ SEA EWW_00051397, 851-51, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022.

⁴⁷ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁴⁸ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

⁴⁹ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁵⁰ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

⁵¹ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁵² SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

⁵³ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁵⁴ SEA EWW_00056491, at SEA EWW_00056500 (10), Harbor Island Sewer and Drain Plan, 1973.

SW Lander St Outfall

A 1960 engineering plan identified an existing SD located along SW Lander St that discharged into the WWW.⁵⁵ It is not known whether this was a City outfall or a private outfall. This SD is also shown on a 1973 “existing [City] storm drainage” map.⁵⁶ A 1990 storm sewer map does not show the outfall.⁵⁷

Harbor Island Combined Sewer and Sanitary System Overflows

In 1958, two combined sewer overflow points were located on Harbor Island, with one discharging to the WWW in the southwest corner of Harbor Island and one discharging to Elliott Bay at the north end of Harbor Island.⁵⁸ The City has not located any additional information on these overflow structures.

Harbor Island has had a separate sanitary drainage system containing overflow points that discharged to the surrounding waterways since the early 1960s.⁵⁹ Legislation from 1967 authorized the connection of the sanitary sewers on Harbor Island to Metro’s sanitary sewer system.⁶⁰ The connection was completed sometime after 1973.⁶¹

The overflow points were:

- SW Spokane St Overflow at 13th Ave SW: CSO, No. 103 (WWW)⁶²
- SW Spokane St Overflow at 13th Ave SW: EOF, No. 102 (WWW)⁶³
- SW Spokane St Overflow at 10th Ave SW: EOF, No. 163 (EWW)⁶⁴
- SW Hanford St Overflow at 11th Ave SW: EOF, No. 162 (EWW)⁶⁵

⁵⁵ SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁵⁶ SEA EWW_00056491, at SEA EWW_00056518 (28), Harbor Island Sewer and Drain Plan, 1973.

⁵⁷ SEA EWW_00056244, at SEA EWW_00056252 (9), Metro letter to City re PCB results from storm drains on HI, 1990; SEA EWW_00056244, at SEA EWW_00056252 (9), Metro letter to City re PCB results from storm drains on HI, 1990.

⁵⁸ SEA239555, at SEA239697 (143), Metropolitan Sewerage and Drainage Report, 1958.

⁵⁹ SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00046126-all, 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

⁶⁰ SEA EWW_00054888-all, CF 257671, 1967; SEA EWW_00054896-all, CF 257847, Petition of City Engineer, 1967.

⁶¹ SEA EWW_00047877-all, 851-52, 11th Ave SW et al, 1960; SEA EWW_00047877-all, 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶² SEA695112, at SEA695123 (12), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶³ SEA695112, at SEA695123 (12), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶⁴ SEA695112, at SEA695127 (16), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶⁵ SEA695112, at SEA695127 (16), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

- SW Lander St Overflow at 16th Ave SW: EOF, No. 105 (WWW)⁶⁶
- SW Lander St Overflow at SW Lander St and 13th Ave SW: EOF (WWW)⁶⁷
- SW Florida St Overflow at 16th Ave SW: EOF, No. 106 (WWW)⁶⁸
- 13th Ave SW Overflow: No. 228, overflow abandoned sometime prior to 1975 (Elliott Bay)⁶⁹
- 11th Ave SW Overflow at SW Massachusetts St: EOF, No. 077 (Elliott Bay/ESW)⁷⁰
- Chelan Ave SW at 16th Ave SW: EOF, No. 104 (WWW)⁷¹

Records show that sometime after 1990 the overflows were abandoned or removed; currently there are none.⁷²

Outfall Construction and Maintenance

The City is not required to retain records regarding outfall construction or repair activities longer than six years, and few such records exist. In addition to the information provided above, construction information for individual outfalls may be found in engineering plans, which are listed in the response to 1.n, and in outfall notes publicly available on the City's GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/.

Historically, maintenance of drainage systems and outfalls varied and was based on findings of annual inspections and past experience with the system.⁷³ Some systems required flushing, dragging, or root removal.⁷⁴ Engineering annual reports from the 1930s through the 1960s identify general maintenance and construction activities including cleaning, root removal, and sand dragging of main and side sewers.⁷⁵ In 1989, under a voluntary agreement with EPA, the City cleaned out the entire Harbor Island storm drain system and installed tide valves at all the system outfalls.⁷⁶

⁶⁶ SEA695112, at SEA695123 (12), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶⁷ SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973; SEA EWW_00043431-all, 777-107, 11th Ave SW Et al Pump Station engineering plan, 1965.

⁶⁸ SEA695112, at SEA695124 (13), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁶⁹ SEA239555, at SEA239697 (143), Metropolitan Sewerage and Drainage Report, 1958; (27), Harbor Island Sewer and Drain Plan, 1973.

⁷⁰ SEA695112, at SEA695123 (12), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁷¹ SEA695112, at SEA695123 (12), 1975 CSO permit; SEA EWW_00056491, at SEA EWW_00056517 (27), Harbor Island Sewer and Drain Plan, 1973.

⁷² City GIS Water and Sewer Map, at https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext/, accessed: 5/24/2022; SEA EWW_00056244, at SEA EWW_00056252 (9), Metro letter to City re PCB results from storm drains on HI, 1990.

⁷³ SEA239555, at SEA239699 (145), Metropolitan Sewerage and Drainage Report, 1958.

⁷⁴ SEA239555, at SEA239700 (146), Metropolitan Sewerage and Drainage Report, 1958.

⁷⁵ SEA EWW_00024974, at SEA EWW_00024991 (18), 1938 Annual Engineering Report; SEA EWW_00027676, at SEA EWW_00027677-678 (2-3), 1956 Annual Engineering Report; SEA EWW_00027729, at SEA EWW_00027735 (7), 1966 Annual Engineering Report.

⁷⁶ SEA EWW_00055033, Response at Harbor Island Superfund Site, 1990.

As noted in the separate outfall descriptions above, some outfalls were altered by extending them further into the water. Some were dredged to maintain clearance. See the response to 1.j. for information on dredging.

Currently, mainlines and outfalls may be on an inspection and/or cleaning schedule, depending on previous inspection findings.⁷⁷ Recent outfall maintenance activities include line cleaning and installation and repair of flapgates and tide valves.⁷⁸

- i. Describe each release of materials at or from a Subject Property, including the type and quantity of the materials, the location of the release, the impacted media, and the response.

This question is not applicable to the facilities addressed in this response since materials are not handled at outfalls. The City has provided available information on chemicals in flows through its outfalls in response to 1.o.

- j. Provide information on past dredging or future planned dredging in the EWOU.

Historically, the City performed periodic maintenance dredging at several outfalls that discharged into the East Waterway. Most or all dredging was undertaken for navigation and berthing clearances at the request of pier and dock owners near the outfalls.⁷⁹

In 1924, deposits at the Lander Street and Connecticut Street outfalls were dredged by Puget Sound Bridge and Dredging Company.⁸⁰ The City authorized dredging of the Lander and Connecticut Street outfalls again in 1924, 1925, 1926 and 1933.⁸¹ The Connecticut outfall was dredged in 1936 and 1937.⁸² The Hanford Street outfall was dredged in 1956.⁸³

Based on available records and information, the City has not undertaken or authorized dredging of any outfalls since 1956 and has no plans to dredge outfalls in the future.

- k. Provide all documents pertaining to the use, storage, or disposal of any hazardous substances, pollutants, or contaminants at the Subject Property.

⁷⁷ Pers. Com. w/ C. Baker, 2016.

⁷⁸ SEA EWW_00054695, at SEA EWW_00054712, 714 (18, 20), EWW Source Control Update, 2019; SEA EWW_00055222, at SEA EWW_00055233(12), Final Report, Contaminant Source Tracing, 1990.

⁷⁹ SEA EWW_00056341, at SEA EWW_00056344-346 (4-7), Ordinance 66447, 1936; SEA EWW_00054838-all, CF 103120, 1926.

⁸⁰ SEA EWW_00056319-all, Ordinance 47729, 1924.

⁸¹ SEA EWW_00056323-all, Ordinance 52120, 1926; SEA EWW_00056338-all, Ordinance 64059, 1933; SEA EWW_00054838-all, CF 103120, 1926; SEA EWW_00054842-all, CF 141338, 1933.

⁸² SEA EWW_00056341-all, Ordinance 66447, 1936; SEA EWW_00054845-all, CF 154946, 1937.

⁸³ SEA EWW_00056360-all, Ordinance 84703, 1955; SEA EWW_00055098-all, Dredging correspondence Hanford St Outfall, 1956.

Hazardous substances are not handled at outfalls, so this question is not applicable. The City has provided available information on chemicals in flows through its outfalls in response to 1.o.

- l. Provide all information on electrical equipment used at the Subject Property, including transformers or other electrical equipment that may have contained polychlorinated biphenyls (PCBs).

No electrical equipment is associated with City outfalls.

- m. Provide information on the type(s) of oils or fluids used for lubrication of machinery or other industrial purposes, and any other chemicals or products which are or may contain hazardous substances, pollutants, or contaminants which are or were used at the Subject Property.

No oils, chemicals, or products containing hazardous substances are used by the City in association with outfalls.

- n. Provide any Subject Property drainage descriptions plans or maps that include information about storm drainage which includes, but is not limited to, above or below surface piping, ditches, catch basins, manholes, and treatment/detention or related structures including outfalls. If available, also include information about connections to each sanitary sewer.

Outfall Name	Engineering Plan(s)
Connecticut St Outfall	SEA EWW_00045105-all ⁸⁴ SEA EWW_00045408 ⁸⁵ SEA EWW_00045197 ⁸⁶ SEA EWW_00046016 ⁸⁷
SW Hinds St Outfall/S Hinds St CSO	SEA EWW_00054719-all ⁸⁸ SEA EWW_00054731-all ⁸⁹
W Hanford St Outfall	SEA EWW_00045921-all ⁹⁰
S Stacy St Outfall	SEA EWW_00054737-all ⁹¹

⁸⁴ 36-41, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910.

⁸⁵ 39-9, Connecticut St & 4th Ave Trunk Sewer engineering plan, 1910.

⁸⁶ 36-42, Connecticut Trunk Sewer Outfall engineering plan, 1912.

⁸⁷ 805-37, Pier 39 - Alaskan Wy & Connecticut St engineering plan, 1943.

⁸⁸ 39-9, Improvement of Hinds St Outfall engineering plan, 1918.

⁸⁹ 861-26, S Hinds St SD Extension engineering plan, 1970.

⁹⁰ 777-8, W Hanford St et al Trunk Sewer engineering plan, 1928.

⁹¹ 865-58, S Stacy St sanitary sewers engineering plan, 1975.

Outfall Name	Engineering Plan(s)
Lander St Outfall/W Lander St Outfall	SEA EWW_00045288-all ⁹² SEA EWW_00043455-all ⁹³ SEA EWW_00043787-all ⁹⁴ SEA EWW_00047717 ⁹⁵ SEA EWW_00048186 ⁹⁶ SEA EWW_00047717-all ⁹⁷
S Spokane St Outfall	SEA EWW_00046119-all ⁹⁸
Harbor Island Outfalls	SEA EWW_00051397-all ⁹⁹ SEA EWW_00047877-all ¹⁰⁰ SEA EWW_00046126-all ¹⁰¹

- o. With respect to past activities or operations at each Subject Property, provide copies of any stormwater or drainage studies, including data from sampling, conducted at the Subject Property. Also provide copies of any Stormwater Pollution Prevention or Maintenance Plans or Spill Plans that may have been developed for different operations during Respondent's occupation of the Subject Property.

Responsive documents have been produced and indexed.

- p. Describe each underground storage tank present at any time on a Subject Property, including but not limited to the size and location of the tank, the materials stored in the tank, the time period of use, whether any material leaked from the tank, the type and quantity of leaked material, and the response to the leaked material.

No underground tanks are associated with City of Seattle outfalls.

- q. Provide the names and last known address of any tenants or lessees, the dates of their tenancy and a description of the activities or operations they conducted while present at the Subject Property.

No tenants or lessees are associated with City of Seattle outfalls.

⁹² 36-7, Lander St Trunk Sewer engineering plan, 1909.

⁹³ 777-429, South Lander St et al Sewer Separation engineering plan, 1990.

⁹⁴ 777-447, Lander Separation Project Phase 1 engineering plan, 1989.

⁹⁵ 851-37, W Lander St Outfall Extension engineering plan, 1953.

⁹⁶ 890-65, 3rd Ave S Storm Drain Extension engineering plan, 1997.

⁹⁷ 851-37, W Lander St Outfall Extension, 1953.

⁹⁸ 809-67, Spokane St et al Sewers engineering plan, 1952.

⁹⁹ 851-51, 11th Ave SW et al sanitary and storm sewers engineering plan, 1963.

¹⁰⁰ 851-52, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

¹⁰¹ 851-53, 11th Ave SW et al sanitary and storm sewers engineering plan, 1960.

- r. If Respondent, its parent corporation, subsidiaries or other related or associated companies have filed for bankruptcy, provide:
 - i. the U.S. Bankruptcy Court in which the petition was filed;
 - ii. the docket numbers of such petition;
 - iii. the date the bankruptcy petition was filed;
 - iv. whether the petition is under Chapter 7 (liquidation), Chapter 11 (reorganization), or other provision; and
 - v. a description of the current status of the petition.

[The Respondent, City of Seattle, has not filed for Bankruptcy.](#)

- s. If not already provided, identify and provide a last known address or phone number for all persons, including Respondent's current and former employees or agents, other than attorneys, who have knowledge or information about the generation, use, purchase, storage, disposal, placement, or other handling of hazardous substances, pollutants, or contaminants, or transportation of hazardous substances, pollutants, or contaminants to or from, the Subject Property.

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